

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

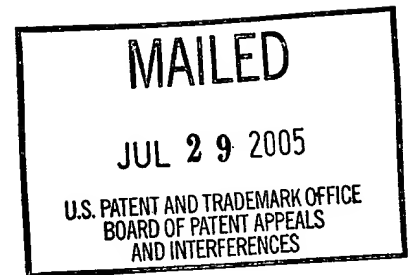
UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JOHN U. KNICKERBOCKER,
VOYA R. MARKOVICH and
THOMAS R. MILLER

Appeal No. 2005-1695
Application No. 09/817,843

ON BRIEF



Before THOMAS, BARRETT and MACDONALD, Administrative Patent Judges.

THOMAS, Administrative Patent Judge.

DECISION ON APPEAL

Appellants have appealed to the Board from the examiner's final rejection of claims 1 through 3, 17 through 21 and 35 through 37.

Claim 1 is reproduced below:

1. An electronic package having selectively controlled contact pad-laminate surface adhesion comprising:

a dielectric packaging substrate having a major surface;

Appeal No. 2005-1695
Application No. 09/817,843

a conductive foil laminated to said major surface wherein said foil has at least one side having a smooth portion thereof and wherein said smooth portion contacts said major surface of said dielectric packaging substrate.

The following references are relied on by the examiner:

Gotoh et al. (Gotoh)	6,204,454	Mar. 20, 2001 (filed: Dec. 28, 1998)
Elenius et al. (Elenius)	6,441,487	Aug. 27, 2002 (filed: Oct. 20, 1997)

Claims 1 through 3 and 17 through 21 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Elenius. Claims 35 through 37 stand rejected under 35 U.S.C. § 103. As evidence of obviousness, the examiner relies upon Elenius in view of Gotoh.

Rather than repeat the positions of the appellants and the examiner, reference is made to the brief and reply brief for appellants' positions, and to the answer for the examiner's positions.

OPINION

We reverse the rejection of claims 1 through 3 under 35 U.S.C. § 102 and the corresponding rejection of dependent claims 35 through 37 under 35 U.S.C. § 103.

Independent claim 1 on appeal requires that the claimed conductive foil be laminated to a major surface of a dielectric packaging substrate. In the statement of the rejection at page

Appeal No. 2005-1695
Application No. 09/817,843

3 of the answer and in the ensuing responsive arguments, the examiner asserts that the element 22 in figure 2 of Elenius corresponds to the claimed dielectric packaging substrate and that the element 30 comprises the claimed conductive foil having a smooth portion which is laminated with the major surface of the dielectric packaging substrate. In asserting the rejection, the examiner makes no reference to the corresponding specification teachings in Elenius to substantiate the assertions made.

With respect to the rejection of claim 1 under 35 U.S.C. § 102, we reverse this rejection and the rejection of its respective dependent claims under 35 U.S.C. § 102 and 35 U.S.C. § 103 because the examiner has not set forth a prima facie case of anticipation of independent claim 1 as generally asserted by appellants in the brief and reply brief. In figure 2 the semiconductor wafer 14 has a front surface 12 onto which is placed a die wafer passivation layer 22, to which in turn the redistribution trace 30 is placed. It is this redistribution metal layer 30 that forms the solder bump pads 26 as well as the conductive bond pads 32 to the left of figure 2. The summary of the invention of Elenius at columns 3 through 5 also generally characterizes this redistribution layer as a patterned metal layer.

Appeal No. 2005-1695
Application No. 09/817,843

It is not until column 7, lines 1 through 28, that the manner in which this patterned metal layer/redistribution trace 30 is formed is discussed. The discussion at this location of Elenius plainly indicates that this metal layer or film 26/30/32 is not formed as a foil nor is it laminated to the underlying substrate-like surfaces. Column 7, lines 12 through 14 teach that this layer is formed by metal sputtering techniques which in the art is not consistent with the formation of a foil-like structure that is laminated to an underlying surface. (As an aside, the approach followed here in Elenius appears to compare with appellants' disclosed invention in figures 7 through 11 characterized as a patterned plated structure.)

Elenius does not otherwise appear to teach or suggest to the artisan that a conductive foil is utilized to form the patterned metal layer/redistribution trace 30, nor does it appear to be laminated to any underlying surface. Since we are unable to therefore sustain the rejection of independent claim 1 on appeal, the corresponding rejection of dependent claims 2 and 3 under 35 U.S.C. § 102 as well as the additional rejection under 35 U.S.C. § 103 of claims 35 through 37 must also be reversed.

Appeal No. 2005-1695
Application No. 09/817,843

On the other hand, since no arguments have been presented to us on appeal in the principal brief and reply brief as to independent claim 17 and its dependent claims 18 through 21, which stand rejected under 35 U.S.C. § 102, this rejection is sustained. Independent claim 17 does not recite the conductive foil lamination features with a smooth surface as argued between appellants and the examiner like independent claim 1 on appeal.

In view of the foregoing, the decision of the examiner rejecting claims 1 through 3 and 17 through 21 under 35 U.S.C. § 102 is sustained only as to claims 17 through 21, and the rejection of claims 35 through 37 under 35 U.S.C. § 103 is reversed. Accordingly, the decision of the examiner is affirmed-in-part.

Appeal No. 2005-1695
Application No. 09/817,843

CONNOLLY, BOVE, LODGE & HUTZ, LLP
P.O. BOX 19088
WASHINGTON, D.C. 20036-3425